



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

FERNALD _____
LOG B-2133

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FILE: 6446.7a
REPLY TO THE ATTENTION OF:

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SEP 20 2001

Mr. Johnny W. Reising
United States Department of Energy
Feed Materials Production Center
P.O. Box 398705
Cincinnati, Ohio 45239-8705

SRF-5J

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RE: IEMP 2nd Quarter 2001

Dear Mr. Reising:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the United States Department of Energy's (U.S. DOE) Integrated Environmental Monitoring Plan (IEMP) data quarterly summary for the second quarter of 2001, and the Responses to Comments (RTC) on U.S. EPA's comments on the first quarter of 2001 IEMP data summary.

This document provides a summary of the IEMP data collected during the second quarter of 2001 and responses to U.S. EPA's previous comments on the first quarter 2001 data summary.

U.S. DOE has adequately addressed U.S. EPA's previous comments. However, U.S. EPA has noted some deficiencies in the second quarter data summary posted on the IEMP Extranet site. U.S. EPA has attached its comments.

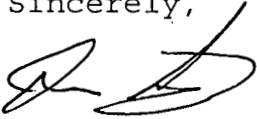
U.S. DOE must make the attached changes to future IEMP reports on the Extranet site.

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Please contact me at (312) 886-0992 if you have any questions regarding this matter.

Sincerely,



James A. Saric
Remedial Project Manager
Federal Facilities Section
SFD Remedial Response Branch #2

Enclosure

cc: Tom Schneider, OEPA-SWDO
Kim Chaney, U.S. DOE-HDQ
John Bradburne, Fluor Fernald
Terry Hagen, Fluor Fernald
Tim Poff, Fluor Fernald

TECHNICAL REVIEW COMMENTS ON
"SECOND IEMP DATA QUARTERLY SUMMARY FOR 2001"

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

SPECIFIC COMMENTS

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 5-1 Page #: 5-1 Line #: Not Applicable (NA)
Original Specific Comment #: 1

Comment: The discussion of the air monitoring data included in the quarterly summary is confusing. The first bullet states that the summary includes "radiological air particulate monitoring results from biweekly and quarterly composite samples from March through June 4, 2001." However, the data presented in Tables 5-1 through 5-6 are labeled as "first quarter 2001" results, or data collected from January through March 2001. Based on a comparison with data files from the Integrated Environmental Monitoring Plan (IEMP) Extranet Site, it appears that Tables 5-1 through 5-6 actually contain first-quarter (January through March) data and not data collected from March through June 4. Subsequent quarterly summaries should more clearly and accurately describe the data that they include.

Commenting Organization: U.S. EPA
Table #: 5-7
Original Specific Comment #: 2

Comment: The title of this table is "Continuous Environmental Radon Monitoring Average Concentrations." The title should be revised to more clearly indicate that the data presented are monthly average concentrations. Daily and hourly radon concentrations are considerably higher than the monthly average concentrations presented in the table.

Commenting Organization: U.S. EPA
Section #: NA
Original Specific Comment #: 3

Comment: The quarterly particulate, uranium, and thorium data available on the IEMP Extranet Site are not complete. Tables 5-2 through 5-6 indicate that seven biweekly samples were collected during the first quarter of 2001. However, the data file on the Extranet Site titled "particulate1stqtr01" contains results for only five sampling dates (January 9 and 23, February 6 and 20, and March 6). Results for the remaining two sampling dates during the first quarter (March 20 and April 3) are missing.

from the data file. The missing results are not included in the data file for the second quarter, which begins with results for April 17. The data files on the IEMP Extranet Site should be complete and consistent with the results presented in the quarterly summaries.

Commenting Organization: U.S. EPA
 Section #: NA Page #: NA
 Original Specific Comment #: 4

Commentor: Saric
 Line #: NA

Comment: The IEMP Extranet Site data file titled "compositelstqtr01" includes quarterly composite concentrations for uranium and thorium isotopes. Based on the assumption that concentrations are reported in units of 10^{-6} picoCuries per cubic meter (pCi/m³), the total uranium and thorium 230 concentrations reported in this data file are consistently lower (by a factor of approximately two) than the quarterly average concentrations presented in Tables 5-2 (total uranium) and 5-5 (thorium 230). Examples of such deficiencies in reported concentrations are presented below.

Location	Radionuclide	Quarterly Composite Concentration Reported in "compositelstqtr01"	Quarterly Average Concentration Reported in Table 5-2 or 5-5
AMS-3	Total uranium	162	339
	Thorium 230	69	139
AMS-8A	Total uranium	149	360
	Thorium 230	48	123
AMS-9C	Total uranium	185	359
	Thorium 230	61	122

Note: All concentrations are assumed to be reported in 10^{-6} pCi/m³.

The two sets of concentrations are derived from the same filters and would be expected to agree more closely. The concentrations reported in Tables 5-2 and 5-5 are average results for seven biweekly filters analyzed during the first quarter of 2001. The quarterly composite concentrations reported in the Extranet Site data file were obtained from a portion of each of these seven biweekly filters, combined, and then analyzed at the end of the quarter. The apparent discrepancies between the concentrations reported in the data file and in Tables 5-2 and 5-5 should be explained, and the potential effects of these discrepancies on the

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estimated fenceline doses presented in Table 5-1 should be discussed.

Commenting Organization: U.S. EPA
Section #: NA Page #: NA
Original Specific Comment #: 5

Commentor: Saric
Line #: NA

Comment: All data presented on the IEMP Extranet Site should be clearly labeled with their concentration units. The Extranet Site data files titled "particulatelstqtr01" and "compositelstqtr01" contain uranium, thorium, and radium results but do not include concentration units. Without this information, it is difficult to interpret the results and to independently verify the data presented in the quarterly summary.